Work Order ID 120582

120582

Wednesday, June 04, 2014 3:09:05 PM

Item ID: D3954-5 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Chain Lug

Start Date: 6/05/14 **Start Qty:** 12.00 *12* 8

Required Date: 6/10/14 **Req'd Qty:** 12.00 *12* 8

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** MLS **Date:** 4-20-09 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Draw Nbr	Revision Nbr
D3954	D

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
100		0.00				8	0		J.C.L. 14/10/27 DAS 23 9-89
100									
Mill Conv	**Memo**	0.00							
Conventional Milling Machine	mill to size								
1									
110		0.00							DAS 23 9-89
110						8	0		
Waterjet	**Memo**	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D3954 Dwg Rev: D Prog Rev: D								
3031 1" x 2"	2-Deburr if necessary								

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Work Order ID 120582

Wednesday, June 04, 2014 3:09:05 PM

120582

Item ID: D3954-5 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Chain Lug

Start Date: 6/05/14 **Start Qty:** 12.00 *12*

Required Date: 6/10/14 **Req'd Qty:** 12.00 *12*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC2- Inspect parts off machine FAI/FAIB	0.00							DAS 23 9-89 14-10-16
120						8	0		
QC	**Memo**	0.00							
Quality Control									
125		0.00							
125						8	0		J.C.L. 14/10/27
Mill Conv	**Memo**	0.00							
Conventional Milling Machine	Open hole using 0.748" reamer and mill as per Dwg								
130	QC8- Inspect parts - second check	0.00							
130						8			SL 14-10-28
QC	**Memo**	0.00							
Quality Control									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

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Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
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Training	☐									
Transport	☐									
Unapproved	☐									

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☐ Misread
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☐ Part Lost/Missing
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☐ Power Loss/Surge
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☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Work Order ID 120582

Wednesday, June 04, 2014 3:09:05 PM

120582

Item ID: D3954-5 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Chain Lug

Start Date: 6/05/14 **Start Qty:** 12.00 *12*

Required Date: 6/10/14 **Req'd Qty:** 12.00 *12*

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Cust Item ID:

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Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location: W/A 007	0.00							
140						8	12	14-10-29	
Packaging	**Memo**	0.00							
Packaging									
150	QC21- Final Inspection - Work Order Release	0.00							
150							14/10/29		
QC	**Memo**	0.00							
Quality Control									

14-10-29

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
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☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

Picklist Print

Wednesday, June 04, 2014 3:09:04 PM

Work Order ID: 120582

120582

Parent Item: D3954-5

D3954-5

Parent Item Name: Chain Lug

Start Date: 6/05/14 **Required Date:** 6/10/14

Start Qty: 12.00 **Required Qty:** 12.00

Comments: IPP REV:A 11.08.16 AS PER REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303B1.000X2.000		Purchased	No			100	f	44.7500	0.5	7			
M303B1.000X2.000									**				
303 BAR 1" X 2"													

DAS 23 ~~989~~ 14-10-16

Location	Loc Qty	Loc Code
MAT049	44.75	
m125822	8.75	
m128004	12	
m128503	24	

128004.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

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Training	☐									
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☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

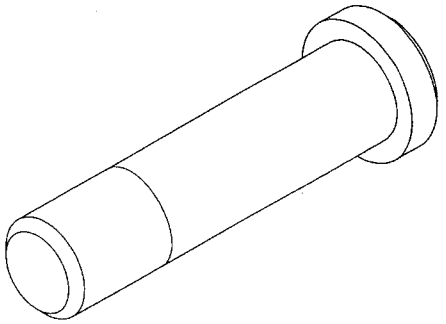
DART AEROSPACE LTD	Work Order:	120582
Description: Chain Lug	Part Number:	D3954-5
Inspection Dwg: D3954 **Rev:** D		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

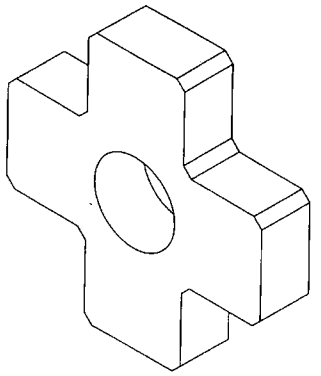
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.88	+/-0.030	0.879	✓		Caliper	SCL - 08
6.00	+/-0.030	5.995	✓		"	
1.50	+/-0.030	1.490	✓		"	
5.250	+/-0.010	5.251	✓		"	
3.25	+/-0.030	3.25	✓		"	
2.63	+/-0.030	2.630	✓		"	
1.06	+/-0.030	1.057	✓		"	
0.385	+0.025/-0.000	0.394	✓		"	
0.31	+/-0.030	0.309	✓		"	
0.25	+/-0.030	0.249	✓		"	
Ø0.750	+0.008/-0.001	0.754	✓		"	
1.00	+/-0.030	0.992	✓		"	
Ø0.375	+0.006/-0.001	0.375	✓		"	
0.438	+/-0.010	0.440	✓		"	
0.750	+/-0.010	0.753	✓		"	
0.12	+/-0.030	0.121	✓		"	
0.253	+0.010/-0.000	0.253	✓		"	
0.370	+/-0.010	0.372	✓		"	

Measured by:	SCL / DAS 23 9-89 /	Audited by:	JL	Preliminary Approval:	
Date:	14-10-16 14/10/27	Date:	14-10-28	Date:	

Rev	Date	Change	Revised by	Approved
A	09.06.11	New Issue	KJ	
B	09.11.04	Dwg Rev updated	KJ	
C	12.09.26	Dimensions updated per Dwg Rev C	KJ	

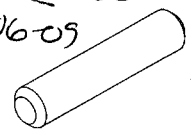


D3954-1 GWT PIN



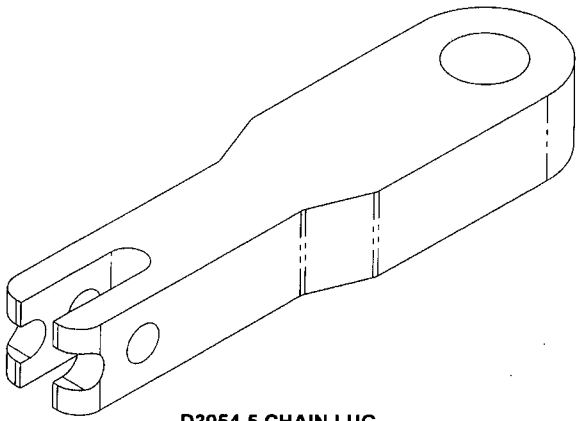
D3954-3 GWT KNOB

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 120582 MCJ
14-06-09

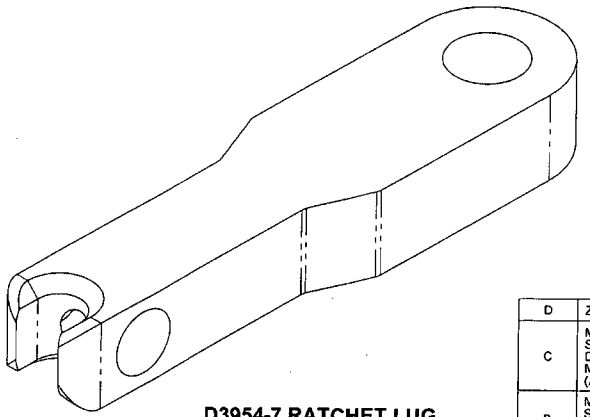


D3954-9 GWT CHAIN PIN

RELEASED
2012 -10- 01



D3954-5 CHAIN LUG

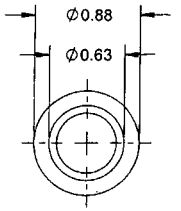


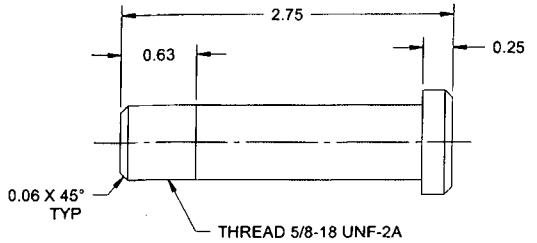
D3954-7 RATCHET LUG

REV.	DESCRIPTION	BY	DATE
D	ZN A6-2, A6-3. REVISED NOTE 2 TO ADD POWDER COAT.	DC	12.08.10
C	MATERIAL UPDATE FOR D3954-1/-3: NOW STAINLESS STEEL ONLY (A8-2); FINISH CHANGED TO "NONE" FOR D3954-1/-3 (A8-2); TOLERANCE ON Ø0.750 WAS Ø0.75 MAX (D3-3 & D7-3); D3954-9 NOW A PURCHASED PART (A2/A6-3). REASON: PAR11-113.	MB	11.07.27
B	MATERIAL UPDATE FOR ALL COMPONENTS WAS STAINLESS STEEL IS CARBON STEEL FOR ALL COMPONENTS. FINISH FOR ALL COMPONENTS WAS RED POWDER COAT IS YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.26

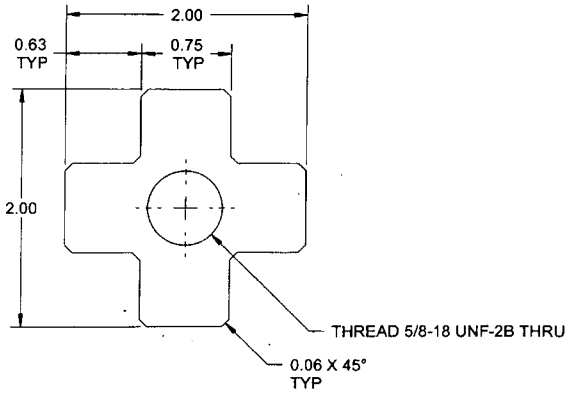
DESIGN	AJS/DSTOW	DART AEROSPACE LTD	
DRAWN	DC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO. D3954	REV. D
MFG. APPR.	AS		SHEET 1 OF 3
APPROVED	AO	TITLE MISC MACHINED PARTS GWT KIT	SCALE NTS
DE APPR.	N/A		
DATE	12.08.10		

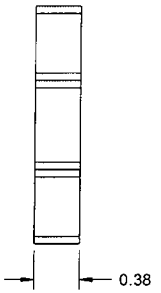
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D3954-1 GWT PIN





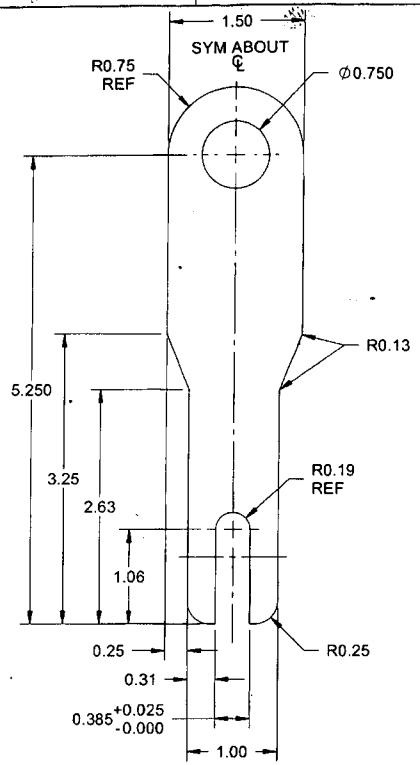
D3954-3 GWT KNOB

RELEASED
2012 -10- 01

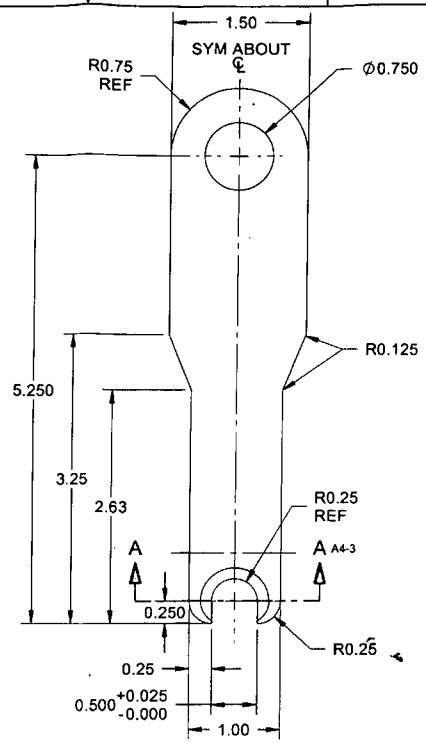
NOTES:
1) MATERIAL -1: AISI 303/304/316 STAINLESS STEEL ROUND BAR
PER ASTM A582 (303) OR ASTM A276 (304/316)
REF DART SPEC M303R OR M304R
-3: AISI 303/304/316 STAINLESS STEEL SHEET
PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASME SA240
REF DART SPEC M303S OR M304S
OR:
AISI 303/304/316 STAINLESS STEEL BAR OR AISI 304/316 PLATE
PER ASTM A582 (303) OR A276 (304/316) OR ASTM A240 (304/316)
REF DART SPEC M303B OR M304B
2) FINISH: SPRAY PAINT YELLOW WITH BERTRAND CG103IB PER DART QSI 005 4.2
OR POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3 (D)
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
7) WEIGHT -1: 0.26 lbs
-3: 0.23 lbs

DESIGN	AJS/DSTOW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	DC	DRAWING NO. D3954 REV. D
CHECKED		SHEET 2 OF 3
MFG. APPR.		TITLE MISC MACHINED PARTS GWT KIT SCALE NTS
APPROVED		
DE APPR.	N/A	
DATE	12.08.10	

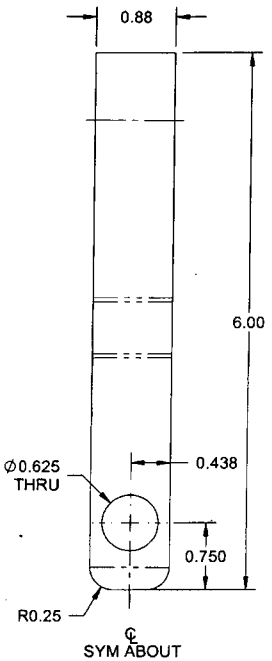
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D3954-5 CHAIN LUG

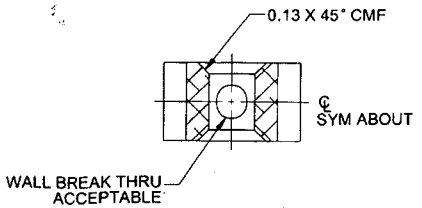


D3954-7 RATCHET LUG

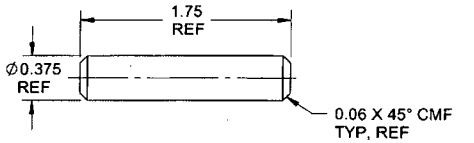


RELEASED
2012 -10- 01

NOTES:
1) MATERIAL:
-5/-7: AISI 1010-1025 MILD STEEL BAR
PER DART SPEC M1010-B
-9: PURCHASE PART FROM MCMASTER-CARR:
P/N 98381A630 (MILD STEEL)
ALTERNATE MATERIAL:
-5/-7: AISI 303/304/316 STAINLESS STEEL BAR OR AISI 304/316 PLATE
PER ASTM A582 (303) OR A276 (304/316) OR ASTM A240 (304/316)
REF DART SPEC M303B OR M304B
-9: PURCHASE PART FROM MCMASTER-CARR:
P/N 90145A630 (STAINLESS STEEL)
2) FINISH -7 ONLY: SPRAY PAINT YELLOW WITH BERTRAND CG103IB PER DART QSI 005 4.2
OR POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3 △D
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
7) WEIGHT -5/-7: 1.56 lbs EACH
-9: 0.05 lbs REF



SECTION A-A C3-3



D3954-9 GWT CHAIN PIN

DESIGN	AJS/DSTOW	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	DC	DRAWING NO. D3954 REV. D
CHECKED	AB	SHEET 3 OF 3
MFG. APPR.	AH	TITLE MISC MACHINED PARTS GWT KIT SCALE NTS
APPROVED	MP	
DE APPR.	N/A	
DATE	12.08.10	

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